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ABSTRACT

This report uses data collected during the National Evaluation of School Nutrition Project (NESNP-II) in 1983-84 to describe the characteristics of students and households eligible for the National School Lunch Program (NSLP) and School Breakfast Program (SBP), and the characteristics of NSLP and SBP participants and their households. The NESNP-II data represent the only extensive examination of the NSLP and SBP since passage of the Omnibus Budget Reconciliation Act (OBRA) of 1981, which enacted a number of significant program reforms including the following changes: (1) a reduction in the reimbursement rates for paid and reduced-price meals; (2) tightened income eligibility requirements; (3) simplified program rules; and (4) increased verification requirements. Thus, an examination of the participants would highlight the changes resulting from OBRA. A description of the NSLP and SBP as they operated in the school year 1983-84 is presented. The following aspects of student and household characteristics are discussed: (1) program availability; (2) participation in school meal program; (3) distribution of meals by price status; (4) distribution of meals based on household characteristics; (5) household income; and (6) transfer income. Sixteen tables are included, along with three figures. Appendix A contains supplementary data tables. Appendix B contains tables concerning the differences in child nutrition program data and NESNP-II household survey data. (JS)

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CHARACTERISTICS OF THE NATIONAL SCHOOL LUNCH AND SCHOOL BREAKFAST PROGRAM PARTICIPATION

DECEMBER 1987

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Characteristics of the National School Lunch and School Breakfast Program Participants

December 1987

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INTRODUCTION

The National School Lunch Program (NSLP) was permanently authorized by the National School Lunch Act of 1946 (P.L. 79-396). The NSLP was instituted to serve two purposes: to safeguard the health and well-being of the Nation's children and to encourage the consumption of domestic agricultural products. The Child Nutrition Act of 1966 authorized the School Breakfast Program (SBP) to achieve similar goals. The NSLP assists school food authorities (SFAs) nationwide in serving nutritious meals to school children by providing cash subsidies and commodities on a per-meal basis. The SBP provides per-meal cash subsidies.

In school year 1983-84, the Food and Nutrition Service (FNS) collected data on students and schools participating in the NSLP and SBP in a followup to an earlier study, the National Evaluation of School Nutrition Programs (NESNP-I) that USDA conducted in 1980-81. This report uses data collected during NESNP-II to describe the characteristics of students and households who had the NSLP and SBP available as well as characteristics of NSLP and SBP participants and their households.

The NESNP-II data represent the only extensive examination of the NSLP and SBP since passage of the Omnibus Budget Reconciliation Act (OBRA) of 1981, which enacted a number of significant program reforms. OBRA reduced the reimbursement rates for paid and reduced-price meals, tightened income eligibility requirements, simplified program rules, and increased verification requirements. Although several years old, the data are fairly representative of the current programs because participation has been stable over the past several years and the programs have not been modified since OBRA.

The remainder of the report is organized in the following manner:

- A description of the NSLP and SBP as they operated in school year 1983-84;
- Student and household characteristics on:
  - program availability;
  - participation;
  - meals by price status;
  - household characteristics;
  - household income; and
  - transfer income; and
- Appendices containing supplementary data on participation and sample size as well as a comparison of NESNP-II and Program Operations Data.

NATIONAL SCHOOL LUNCH AND SCHOOL BREAKFAST PROGRAMS

The school nutrition programs are generally administered by State education agencies through local SFAs. In States that do not administer the programs in private schools because of State constitutional prohibitions, or because they choose not to, the programs are directly administered by FNS through its regional offices.

Institutional Eligibility: In school year 1983-84, a school was eligible to participate in the NSLP and SBP if it:

- Operated under public or nonprofit private ownership, or was a private school with an average annual tuition of $1,500 or less;
- Provided education for students in high school grades or under. Preprimary grades were included when they were located in schools with primary grades or higher, or when they were recognized as part of the educational system in the State;
- Was a residential child care institution licensed by the State to provide residential child care services.

Student Eligibility: Children are eligible to participate in the NSLP or SBP if they attend a participating school. They may receive free or reduced-price meals if their household completes an application and is determined to be eligible based on specific income criteria. It should be noted that not all children to whom the NSLP and SBP are available actually participate in these programs.

Applicant households must indicate their incomes if their children are to be eligible for free meals (below 130 percent of poverty, or $12,870 for a family of four in school year 1983-84) or reduced-price meals (between 130 and 185 percent of poverty). Full-price or paid meals are provided to children from households with income above 185 percent of the Federal poverty guidelines, or $18,315 for a family of four.

The following income sources are considered when determining household income eligibility: salaries, wages, or commissions from employment; earnings from self-employment, including farming; welfare payments; payments from Social Security pensions, retirement, or annuities; other cash income including cash amounts received or withdrawn from any source, including savings, investments, trust accounts; and other resources which would be available for payment of the price of a child's meal.

Each program application must indicate that it may be selected as part of a sample to verify the data provided. Each SFA is required to verify a minimum of 3 percent or up to 3,000 of the approved free or reduced-price applications on file as of October 31. A household's failure to respond to a request for verification results in loss of benefits.

Meal Reimbursement Rates: The Federal government pays fixed amounts of reimbursement per free, reduced-price, and full-price USDA meal served. Reimbursement levels for the 1983-84 school year are shown in table 1. In districts where 60 percent or more of lunches served were in the free or reduced-price category in the second prior school year, 2 cents was added to the reimbursement for each lunch. In districts where 40 percent or more of lunches were served in the free or reduced-price category in the second preceding school year, the subsidy per free and reduced-price breakfast was increased by 12.75 cents. The Federal government also donates a certain value of commodities—11.5 cents in the 1983-84 school year—per lunch served; commodities have not been donated to breakfast programs since the 1978-79 school year.

Table 1

Federal Subsidies Per NSLP and SBP Meal
1983-84 School Year
(cents)

	Free	Reduced-Price	Full-Price
NSLP			
Cash subsidy[a]	120.25	80.25	11.50
Entitlement Commodity	11.50	11.50	11.50
Total	131.75	91.75	23.00
SBP			
Cash subsidy	62.75	32.75	9.00
Severe Need Payment[b]	12.75	12.75	0.00
Total[c]	75.50	45.50	9.00

[a]An additional 2 cents is provided for each lunch served in school districts where 60 percent or more of the NSLP lunches are served free or at a reduced price. This additional 2 cents is not included in this chart.

[b]In certain "especially needy" areas, the amount reimbursed for free and reduced-price breakfast is greater than in "nonespecially-needy" areas. The legislative cap is 12.75 cents—but receipt of this is not guaranteed.

[c]Does not include bonus commodities.

Average Meal Prices: In general, there was little variation in meal prices by grade level, although there was some evidence that students in higher grades paid slightly more for full-price lunches.

The average price paid for a reduced-price lunch was 36 cents, slightly lower than the maximum legislated rate of 40 cents. The average price for a full-price lunch was 84 cents in October 1983, with students attending elementary schools (grades 1-6) paying slightly less and junior and senior high school students paying slightly more.

SBP prices showed very little variation by grade level for reduced-price or full-price meals. On average, students paid 25 cents for a reduced-price breakfast and 44 cents for a full-price breakfast.

PROGRAM AVAILABILITY

National School Lunch Program: The NSLP was available to 38.8 million public school students during school year 1983-84 (almost 99 percent of all students enrolled in public schools that year). This does not mean that 38.8 million students actually participated in the program. Participation in the NSLP is described in a later section of this report. Table 2 summarizes the characteristics of students at schools offering the NSLP by five categories: price status (free, reduced-price, or paid), household income as a percent of poverty, grade level, food stamp receipt, and participation in other public assistance programs.

Twenty-seven million, or over two-thirds (68.7 percent) of all students to whom the school lunch program was available, were classified by the school they attended as eligible for full-price benefits (table 2). About one-quarter (26 percent), or 10 million students, were eligible for free benefits and the remaining 2 million (5 percent) were eligible for reduced-price benefits.

Twenty-three percent of students were from households that reported income below 100 percent of Federal income poverty guidelines (table 2 and figure 1).[1] An additional 8 percent were members of households with incomes between 101 and 130 percent of poverty, and over 13 percent of all students were from households which reported incomes between 131 and 185 percent of poverty.

The distribution of students to whom the NSLP was available was relatively uniform across grade levels. About a quarter of all students fall into each of the four categories (grades 1-3, 4-6, 7-9, and 10-12) shown in table 2.

Approximately 14 percent of all students in schools offering the NSLP were from households that reported receiving food stamps in the month prior to the survey. Eleven percent were from households that received some form of cash public assistance.

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1. Although students from households with incomes below 130 percent of poverty are eligible to receive free meals, not all households apply. This is the major reason why there are more students from households with incomes below 130 percent of poverty than there are students certified as eligible for free meals. The same rationale applies to students eligible for reduced-price meals.

Table 2

Distribution of Students at Schools Offering
the National School Lunch Program

1983-84 School Year

	Number of Students at Schools Offering the National School Lunch Program (thousands)	Percentage Distribution of Students at Schools Offering the NSLP
All Students	38,789	100.0%
Meal Price Status		
FREE	10,149	26.2%
REDUCED	1,988	5.1%
FULL	26,652	68.7%
Household Income as a Percent of Poverty		
0-50%	3,500	9.0%
51-100%	5,262	13.6%
101-130%	3,118	8.0%
131-185%	5,204	13.4%
186%+	21,704	56.0%
Grade Level		
Grade 1-3	9,477	24.4%
4-6	10,044	25.9%
7-9	9,696	25.0%
10-12	9,571	24.7%
Food Stamp Receipt		
Receiving Now	5,289	13.6%
Not Receiving	33,482	86.4%
Public Assistance[1]		
Receiving Now	4,188	10.8%
Not Receiving	34,601	89.2%

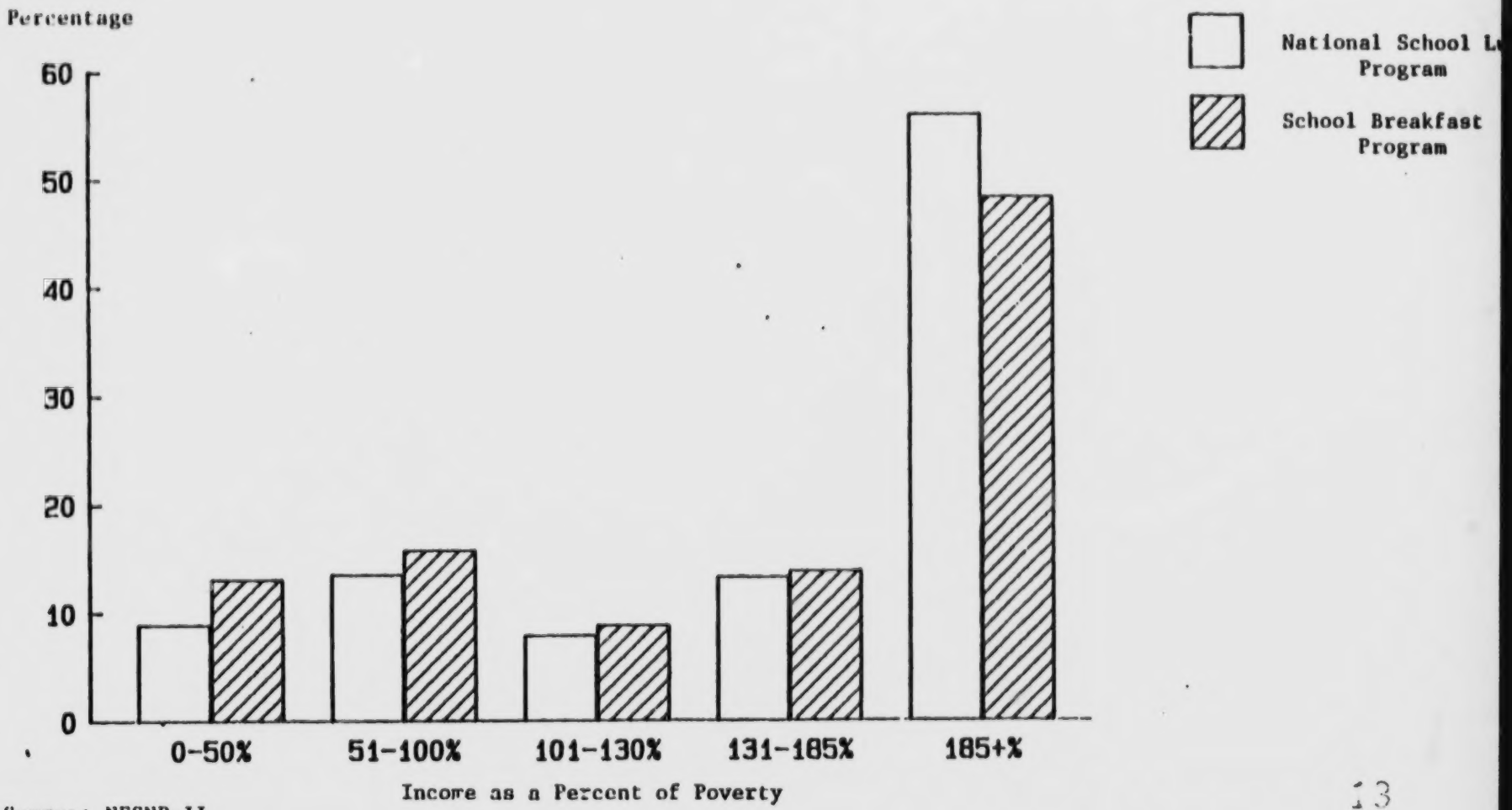
SOURCE: National Evaluation of School Nutrition Programs, Phase II, (NESNP-II).

NOTE: Columns may not sum to total due to rounding.

[1]Public assistance or welfare payments such as AFDC or SSI.

FIGURE 1

Distribution of Students By Household Income as a
Percentage of Federally Defined Income Poverty Standards
NSLP and SBP



Source: NESNP-II
School Year 1983-1984

School Breakfast Program: Slightly less than 40 percent of the students to whom the NSLP was available also had the SBP available. Table 3 summarizes the characteristics of students in schools offering the SBP. In general, the SBP was available to younger students from lower-income households. Nearly one-half of all students certified as eligible for a free lunch attended a school that offered the SBP. In contrast, only 34 percent of children with a full-price lunch available also had the SBP available.

Almost one-third of all students at schools offering the SBP applied for benefits and were classified as eligible for free meals. An additional 7 percent were classified as reduced-price and the remaining 61 percent as full-price.

Twenty-nine percent of students at schools offering the SBP were members of households that reported gross incomes below the Federal poverty standard, 9 percent were from households with incomes between 101-130 percent of poverty, and 14 percent from households with incomes between 131-185 percent of poverty (table 3 and figure 1). The remaining 48 percent were from households reporting incomes in excess of 185 percent of poverty. Schools offering the breakfast program were disproportionately located in poor, southern and urban school districts.

Students to whom the SBP was available were more likely to attend elementary grades (grades 1-6) than those to whom the NSLP was available (table 3). About 57 percent of all students to whom the SBP was available were in grades 1-6, compared to 50 percent for the NSLP. Only about 20 percent of students to whom the SBP was available were in grades 10-12.

The higher incidence of food stamp and public assistance receipt reflects the lower income status of students attending schools where the SBP is offered (table 3). Eighteen percent of children to whom the SBP was available were members of households that received food stamps; 14 percent were from households that received some other form of public assistance.

PARTICIPATION IN THE SCHOOL MEAL PROGRAMS

Three separate measures of participation in the NSLP and SBP were constructed from the NESNP-II data: participation, average daily participation, and frequency of participation. Each measure of participation was developed because of the particular information it would convey.

- Participation: Students were classified as participants if they ate one or more NSLP lunches during a 5-day survey period. (The NESNP-II survey collected information on program participation over a 5-day period). This measure provides an indication of the total number of students that participate in the program at least once over a 5-day period, which can be compared with the total number of students attending schools that offer the programs, to provide a measure of the maximum participation in the program.

Table 3

Distribution of Students at Schools Offering the School Breakfast Program

1983-84 School Year

	Number of Students at Schools Offering the School Breakfast Program (thousands)	Percentage Distribution of Students at Schools Offering the SBP
All Students	14,935	100.0%
Meal Price Status		
FREE	4,757	31.8%
REDUCED	1,077	7.2%
FULL	9,101	60.9%
Household Income as a Percent of Poverty		
0-50%	1,955	13.1%
51-100%	2,354	15.8%
101-130%	1,334	8.9%
131-185%	2,077	13.9%
186%+	7,215	48.3%
Grade Level		
Grade 1-3	4,203	28.1%
4-6	4,248	28.4%
7-9	3,532	23.6%
10-12	2,952	19.8%
Food Stamp Receipt		
Receiving Now	2,675	17.9%
Not Receiving	12,243	82.1%
Missing	17	
Public Assistance		
Receiving Now	2,096	14.0%
Not Receiving	12,839	86.0%

SOURCE: National Evaluation of School Nutrition Programs, Phase II, (NESNP-II).

NOTE: Columns may not sum to total due to rounding.

- Average Daily Participation: This measure provides an indication of the number of students that could be expected to participate on any given day. Since many students reported receiving fewer than five meals per week, this second measure is lower than the first.

- Frequency of Participation: This measure describes the frequency with which students in the three meal price status categories participate in the program. In particular, it answers questions on the number of meals (e.g., from zero to five meals over a 5-day period) received by free, reduced-price, and full-price program participants. This measure provides an indication of which groups participate—with particular frequency—in the program.

Participation: Any incidence of participation, from 1-5 days, is included as a positive participation rate. From table 4, nearly four out of every five students to whom the NSLP was available participated one or more times over the course of a week. In contrast, only about one in four students to whom the SBP was available participated (table 5). Across all grade levels and meal price categories the participation rate for the NSLP was 78 percent; for the SBP it was 24 percent.

Two patterns of participation were consistent for the NSLP and the SBP. Participation rates were inversely related to grade level—younger students participated at a greater rate than older students. Participation rates also differed by meal price status. Students receiving free meals participated most frequently, followed by reduced-price students. Students in the full-price category had the lowest participation rate.

Almost 88 percent of all children in grades 1-3 participated in the NSLP at least once a week. As grade level increased, the participation rate declined, falling to 61 percent for students in grades 10-12. The pattern of lower participation among older students also held within individual meal price status categories except for reduced-price, where the survey data showed higher participation for grades 4-6 than for grades 1-3. (All results for the reduced-price category should be interpreted with caution, however, because of the small sample size for students in this category. This is particularly true when sub-groups within the reduced-price category are examined.) Appendix table A presents participation by grade level and meal price status.

Virtually all students (96 percent) classified as eligible for free NSLP meals participated at least once a week. Reduced-price participation was also high (91 percent), while the full-price participation rate was considerably lower (69 percent). The pattern of reduced participation by meal price status was consistent for all grades except as noted above. Participation rates by meal price status and grade level ranged from 99 percent for free students in grades 1-3 to 55 percent for full-price students in grades 10-12.

SBP participation rates (table 5) were much lower than those for the NSLP; however, the participation patterns across price status categories and grade level were similar. In general, SBP participation rates should be interpreted with greater caution because the sample size is much smaller.

Table 4

Participation in the National School Lunch Program

1983-84 School Year

	Number of Students Participating at Least Once Per Week (thousands)	Participation Rate	Number of Students Participating on an Average Day (ADP) (thousands)	Average Daily Participation Rate
All Students	30,078	77.5%	25,550	65.9%
Meal Price Status				
FREE	9,763	96.2%	9,319	91.8%
REDUCED	1,816	91.4%	1,658	83.4%
FULL	18,497	69.4%	14,574	54.7%
Grade Level				
Grade 1-3	8,327	87.9%	6,916	73.0%
4-6	8,535	85.0%	7,644	76.1%
7-9	7,373	76.0%	6,230	64.2%
10-12	5,841	61.0%	4,761	49.7%

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: A student is a participant if he or she selects one or more NSLP lunches during a week. The participation rate is the number of participants divided by the total number of students in schools that offer the program. The ADP is calculated as one-fifth the reported number of meals served in a week. The ADP rate is the ADP divided by the total number of students in schools that offer the program.

Table 5

Participation in the School Breakfast Program

1983-84 School Year

	Number of Students Participating at Least Once Per Week (thousands)	Participation Rate	Number of Students Participating on an Average Day (ADP) (thousands)	Average Daily Participation Rate
All Students	3,609	24.2%	2,733	18.3%
Meal Price Status				
FREE	2,564	53.9%	2,107	44.3%
REDUCED	222	20.6%	157	14.6%
FULL	823	9.0%	469	5.1%
Grade Level				
Grade 1-3	1,316	31.3%	1,049	25.0%
4-6	1,337	31.5%	1,027	24.2%
7-9	614	17.4%	425	12.0%
10-12	342	11.6%	232	7.8%

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: A student is a participant if he or she selects one or more SBP breakfasts during a week. The participation rate is the number of participants divided by the total number of students in schools that offer the program. The ADP is calculated as one-fifth the reported number of meals served in a week. The ADP rate is the ADP divided by the total number of students in schools that offer the program.

Less than a third (31 percent) of all students in grades 1-6 participated in the SBP. The participation rate decreased to 12 percent for students in grades 10-12. About 54 percent of the students certified for free meals participated, while only 9 percent of the full-price students reported participating one or more times per week.

Average Daily Participation: Table 4 compares the NSLP participation rate to average daily participation. If participating students reported receiving five meals a week, both measures would yield equal participation rates. Because students can participate less frequently than 5 days in a week, the average daily participation rate is lower than the simple measure of whether or not students participated at some point during the week. The average daily participation rate can be viewed as the proportion of potential meals that were actually served on a typical day.

The average daily participation rate for the NSLP, across all age groups and price status categories, was 66 percent. This means that although 78 percent of all students participated during the course of a week, on any given day 66 percent of the students received a lunch. Average daily participation was higher for students receiving free meals than it was for students receiving paid meals. Ninety-two percent of students certified as eligible for free meals participated on any given day, compared to 55 percent for full-price students.

Both participation measures exhibited similar patterns when examined by grade level. The average daily participation rate for students in grades 1-3 was nearly 75 percent. In contrast, only half of the high school students (grades 10-12) participated on a typical day.

The average daily participation rate for the SBP was 18 percent (table 5). It varied from 44 percent for free to 5 percent for full-price students. Students in grades 1-3 had an average daily participation rate of 25 percent compared to 8 percent for students in grades 10-12.

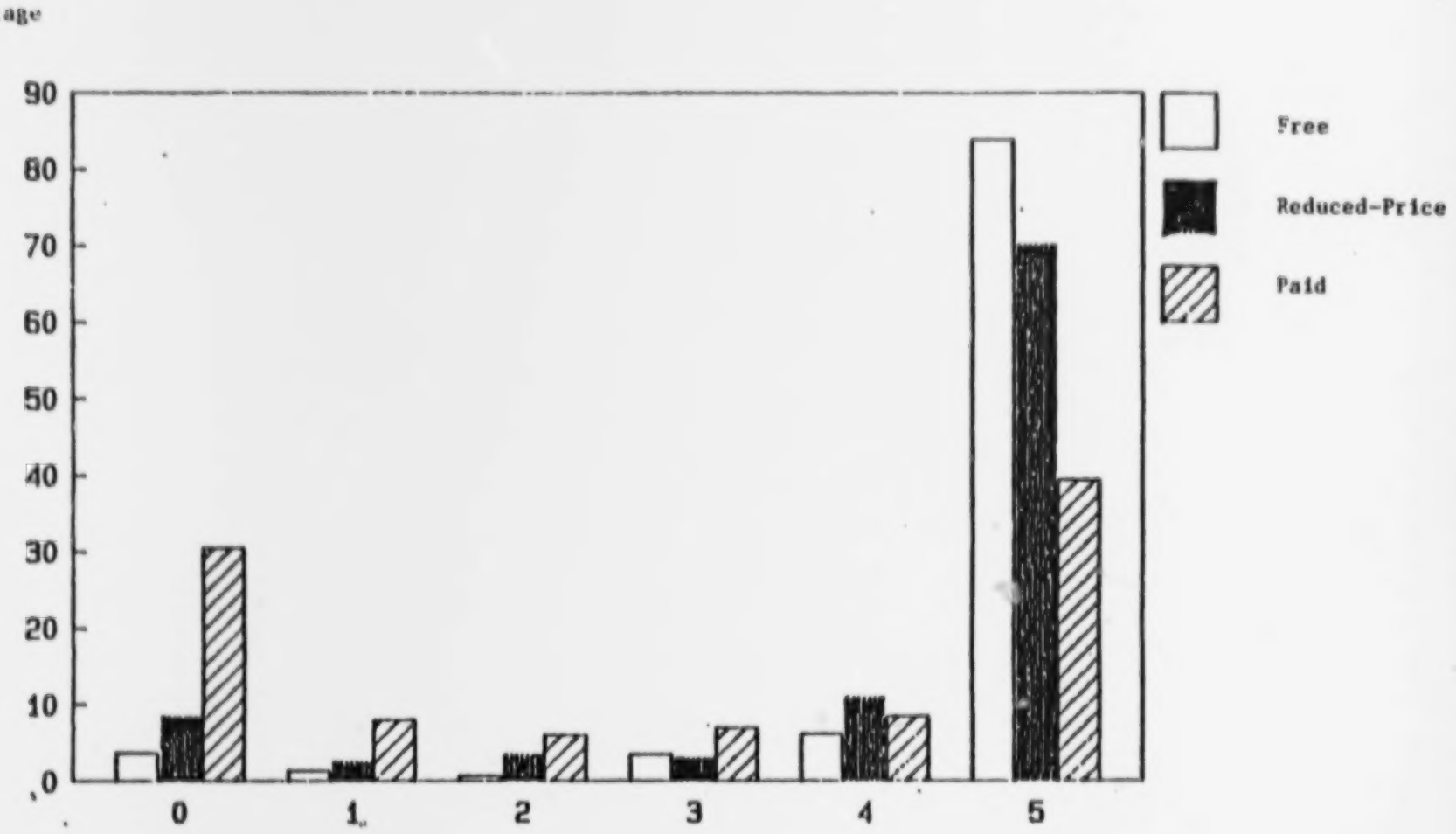
Frequency of Participation: Table 6 shows the distribution of students by frequency of participation for the NSLP and the SBP. In general, students eligible to receive free or reduced-price lunches participated nearly every day (figure 2). Nine out of 10 students certified as eligible for free meals participated four or five times a week. Eighty-four percent of the free students participated 5 days a week and another 6 percent received meals 4 days a week. Only 4 percent of students certified for free meals reported that they did not participate.

Eighty-two percent of all students certified for reduced-price benefits received four or five meals a week, with 71 percent participating every day. Nine percent of reduced-price students reported never participating.

The distribution of students by frequency of participation differed for full-price students (figure 2). The majority of full-price students fell into one of two groups: they either participated 5 days a week (40 percent) or not at all (31 percent). The remaining students were distributed evenly among 1 to 4 days of participation per week. Across all meal price categories, over 60 percent of students participated four or five times a week and 23 percent never participated.

FIGURE 2

Distribution of NSLP Participants by Price Status
and Frequency of Participation, School Year 1983-84



Source: NESNP-II

The distribution of students by frequency of participation in the SBP was virtually the opposite of the NSLP, primarily because a much smaller proportion of the eligible population participated (table 6 and figure 3). Across price status categories, only 54 percent of free students, 21 percent of reduced-price students, and 9 percent of full-price students reported participating during the 5-day survey period. One in three free students participated in the SBP 5 days a week, but the proportion was much lower for reduced-price (10 percent) and full-price (2 percent) students. Overall, three-fourths of the students with the SBP available reported that they never participated, while only 12 percent reported participating five times a week.

DISTRIBUTION OF MEALS BY PRICE STATUS

This section examines the distribution of meals by price status for two characteristics: income as a percent of Federally-defined poverty standards, and student grade level. It also addresses issues of misclassification in the NSLP.

Household Income as a Percent of Poverty: The distribution of meals by price status is related to household income level, as would be expected because price status is determined based on reported household income. Table 7 presents income as a percent of poverty for free, reduced-price, and full-price status categories. Students from households with incomes between 0 and 130 percent of poverty are eligible for free benefits, students between 131 and 185 percent of poverty are eligible for reduced-price benefits, and students above 185 percent of poverty for full-price benefits.

National School Lunch Program: According to the NESNP-II data, 83 percent of free meals were served to students from households with incomes below 130 percent of poverty. However, 10 percent were served to students whose household income indicated that they should receive reduced-price benefits and 8 percent to students with household income indicating that they were eligible only for full-price benefits. There are several possible explanations for why meals would have been served to misclassified students. The most common explanation for misclassification was nonapplication (i.e., students eligible for free or reduced-price benefits paid the full price for meals because their parent(s) did not apply). The NESNP-II survey, which contained specific questions on nonapplication, found that of the potentially eligible parents that did not apply for benefits, 70 percent thought they were ineligible. The remaining 30 percent believed they were eligible but chose not to apply for various reasons (e.g., they did not believe that poor people should receive help from the government, or did not want the school or others to know that they were poor).

In the instance cited above—where free meals were served to students eligible for reduced- or full-price benefits—misclassification can be explained by other reasons, such as timing. Many households may experience changes in income after their applications are filed and, although they are supposed to file revised applications reflecting income changes of over $50 per month, many may not. In the case of the NESNP-II survey, data were collected fairly late in the year. Since households applied for NSLP and SBP benefits at the beginning of the year, the difference in timing may explain many of the income differences leading to assessments of misclassification.

Table 6

Distribution of Students by Meal Price Status and Frequency of Weekly Participation

1983-84 School Year

National School Lunch Program

Frequency of Participation	FREE Number of Students (thous.)	FREE Percent	REDUCED Number of Students (thous.)	REDUCED Percent	FULL Number of Students (thous.)	FULL Percent	TOTAL Number of Students (thous.)	TOTAL Percent
0	387	3.8%	172*	8.6%	8,155	30.6%	8,713	22.5%
1	155*	1.5	55*	2.8	2,171	8.1	2,380	6.1
2	80*	0.8	73*	3.7	1,630	6.1	1,784	4.6
3	363	3.6	66*	3.3	1,881	7.1	2,309	6.0
4	635	6.3	222*	11.2	2,282	8.6	3,139	8.1
5	8,530	84.0	1,401	70.5	10,534	39.5	20,464	52.8
Total	10,149	100.0%	1,988	100.0%	26,652	100.0%	38,789	100.0%
(% of Total)	(26.2%)		(5.1%)		(68.7%)		(100.0%)	

School Breakfast Program

Frequency of Participation	FREE Number of Students (thous.)	FREE Percent	REDUCED Number of Students (thous.)	REDUCED Percent	FULL Number of Students (thous.)	FULL Percent	TOTAL Number of Students (thous.)	TOTAL Percent
0	2,193	46.1%	855	79.4%	8,278	91.0%	11,326	75.8%
1	130*	2.7	49*	4.5	212*	2.3	391	2.6
2	256	5.4	12*	1.2	172*	1.9	441	3.0
3	363	7.6	36*	3.3	158*	1.7	557	3.7
4	272	5.7	20*	1.8	89*	1.0	381	2.6
5	1,543	32.5	105*	9.8	191	2.1	1,839	12.3
Total	4,757	100.0%	1,277	100.0%	9,101	100.0%	14,935	100.0%
(% of Total)	(31.9%)		(7.2%)		(60.9%)		(100.0%)	

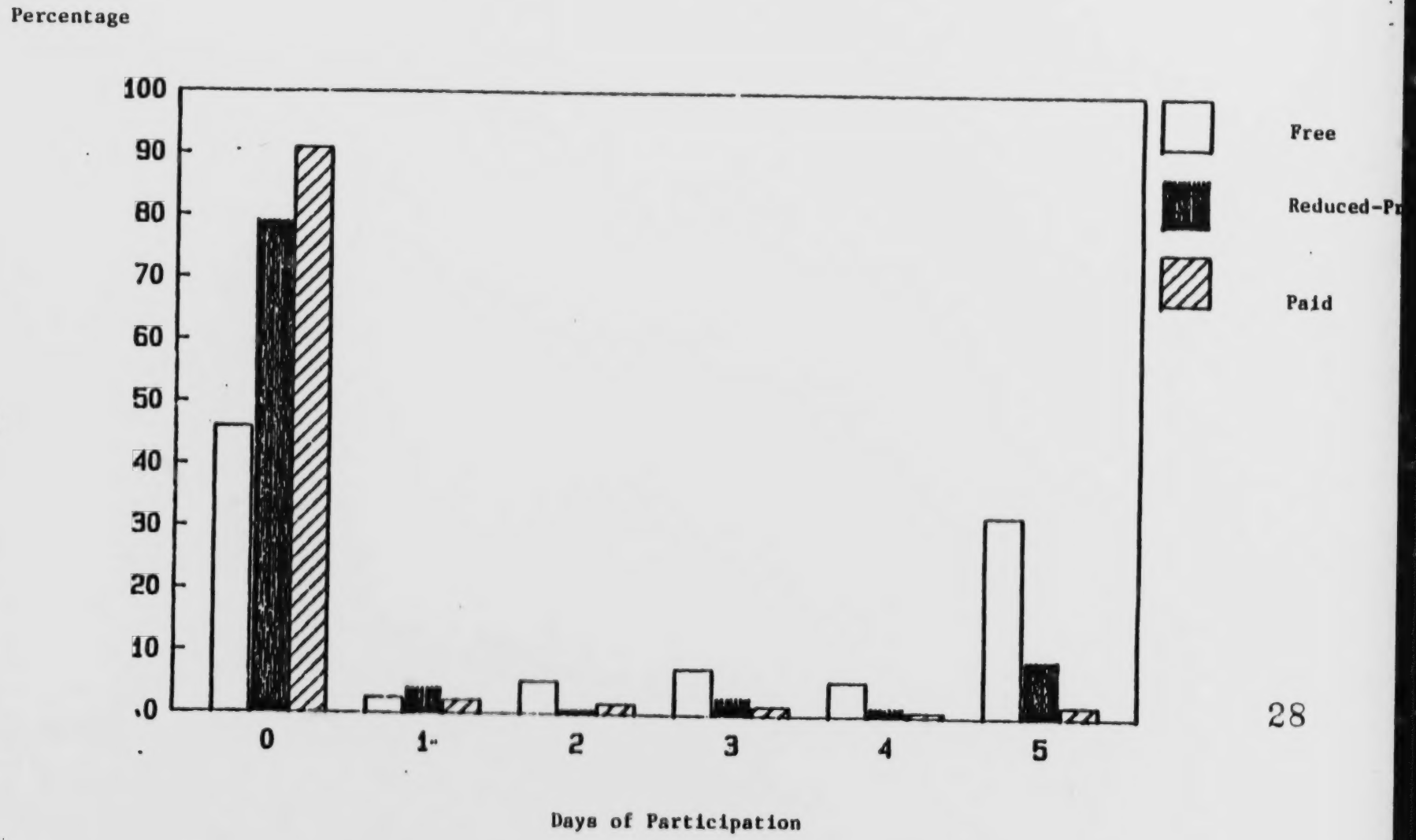
SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

Note: Columns may not sum to total due to rounding.

*Reported statistics are based on an unweighted sample of less than 30 observations.

FIGURE 3

Distribution of SBP Participants by Price Status and Frequency of Participation, School Year 1983-84



Source: NESNP-II

Table 7

Distribution of USDA Weekly Meals by Meal Price Status and Household Income as a Percent of Poverty

1983-84 School Year

National School Lunch Program

Household Income as a Percent of Poverty	PERCENT BY STATUS FREE	REDUCED	FULL	TOTAL NUMBER OF MEALS (thousands)	PERCENT OF TOTAL
0-50%	28.5%	1.9%	2.1%	14,972	11.7%
51-100	39.3	8.2	3.4	21,413	16.8
101-130	14.9	22.6	4.7	12,247	9.6
131-185	9.5	52.3	11.4	17,075	13.4
186+	7.9	15.1	78.4	62,045	48.6
	100.0%	100.0%	100.0%		100.0%
Total Meals (thousands)	46,592	8,288	72,870	127,752	
Percent of Total	(36.5%)	(6.5%)	(57.0%)	(100.0%)	

School Breakfast Program

Household Income as a Percent of Poverty	PERCENT BY STATUS FREE	REDUCED	FULL	TOTAL NUMBER OF MEALS (thousands)	PERCENT OF TOTAL
0-50%	39.6%	14.1%	4.4%	4,380	32.1%
51-100	37.0	11.7	7.0	4,158	30.4
101-130	13.7	31.9*	10.7	1,941	14.2
131-185	6.4	24.6	12.5*	1,156	8.5
186+	3.4	17.7*	65.4	2,030	14.9
	100.0%	100.0%	100.0%		100.0%
Total Meals (thousands)	10,535	786	2,344	13,665	
Percent of Total	(77.1%)	(5.6%)	(17.2%)	(100.0%)	

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: Columns may not sum to total due to rounding.

*Reported figures are based on an unweighted sample of less than 30 observations.

Another reason for misclassification is that households submit inaccurate applications, either inadvertently or intentionally. A portion of all applications are verified to detect fraudulent applications and errors, and to deter ineligible households from applying for benefits. Finally, income or price status could have been misreported in the NESNP-II questionnaire.

Only slightly more than half (52 percent) of the reduced-price meals were served to students from households with incomes between 131 and 185 percent of poverty. A third of the meals were served to students who were certified for reduced-price meals, but who would have been eligible for free meals based on the household income reported on the NESNP-II questionnaire. Fifteen percent were served to students who had household incomes indicating that they should receive full-price benefits only.

A little more than three quarters (78 percent) of all full-price meals were provided to students who were properly classified based on their reported household income. Approximately the same proportion of the remaining meals (11 percent) went to students eligible for reduced-price and free meals. It is important to remember that households that do not apply for benefits are placed in the full-price meal status category. Students classified as full-price but who are eligible for additional benefits may not be misclassified; it is possible that they chose not to apply.

Thirty-seven percent of all lunches were provided free, 7 percent at a reduced price and 57 percent at full price. A large proportion of the free meals were served to students from households with incomes well below the eligibility limits. Twenty-nine percent were served to students from households with incomes below 50 percent of the poverty line. Thirty-nine percent were served to students from households with incomes between 50 and 100 percent of poverty.

School Breakfast Program: The income distribution of households participating in the SBP reflects the lower economic status of areas where the SBP was most frequently available. Over 90 percent of the free meals were served to students from households with incomes below 130 percent of poverty and more than three-fourths (77 percent) of all meals were served to students from households below 100 percent of poverty. Six percent were served to students eligible for reduced-price meals and 3 percent to students who were only eligible for paid breakfasts.

Less than 6 percent of all breakfasts were served to students in the reduced-price category. However, the sample size is small and the results presented here should be interpreted with caution. Only one-quarter of reduced-price meals were served to students in the proper price status classification based on reported household income. Almost 58 percent were served to students entitled to free benefits, and over one-fourth of the reduced-price meals were served to students from households with incomes below the poverty level. Eighteen percent of the reduced-price meals were served to students who should have been certified for full-price meal benefits based on reported household income.

Nearly two-thirds (65 percent) of all full-price breakfasts were served to students from households with incomes above 185 percent of poverty (table 7). The remaining 35 percent were served to students eligible for reduced-price (13 percent) or free breakfasts (22 percent). Full-price breakfasts accounted for slightly more than 17 percent of the total breakfasts served.

Student Grade Level: The distribution of meals by price status was not consistent across grade levels (table 8). Although 37 percent of total lunches served were free, half of the lunches served to students in grades 1-3 were free. In contrast, although 57 percent of all meals were served in the full-price category, they comprised 63 percent of meals served to students in grades 6-9 and 71 percent to those in grades 10-12. When compared to the population of students attending schools that offer the NSLP (see appendix table B), this reflects disproportionately large participation from grades 1-3. (That is, 36 percent of the students in grades 1-3 would have been eligible for free lunches, but approximately half of the lunches served to students in these grades were free.) Across all grades, the number of children that would have been eligible for reduced-price lunches was significantly larger than the number of reduced-price meals consumed (e.g., 13 percent of all children would have been eligible for reduced-price lunches, but only 6.5 percent of all lunches consumed were in the reduced-price category). For the paid lunch category, 50 percent of children in grades 1-3 would have been eligible for paid meals and nearly that amount of meals were served (i.e., 47 percent of meals served to children in grades 1-3 were paid lunches). However, nearly 64 percent of children in the upper grades (i.e., grades 10-12) would have been eligible for paid lunches but significantly more than this amount—over 70 percent—of the lunches consumed in grades 10-12 were paid lunches.

In the SBP, the proportion of free meals was much higher (77 percent), and students in grades 1-3 received a disproportionate share of free meals (82 percent). When contrasted with the population of students with the SBP available, two distinct characteristics emerge. Overall, the percentage of free breakfasts consumed was double the percentage of children that would have been eligible for free breakfasts. For example, approximately 41 percent of children in grades 1-6 would have been eligible for free breakfasts, but nearly twice the number of breakfasts consumed by grades 1-6 (i.e., 78 to 82 percent of meals) were free. Similarly, 31 percent of students in grades 10-12 would have been eligible to receive free meals, but more than twice this amount—67 percent—of the meals consumed in these grades were free. This suggests a high participation rate for children receiving free meals. Characteristics in the reduced-price category were similar to the NSLP. Many more children would have been eligible for reduced-price breakfasts than the percent of reduced-price breakfasts actually consumed. (The only exception was grades 10-12, where the percentage of students that would have been eligible for meals nearly equalled the percentage of reduced-price meals served.) Last, in the paid-meal category, 48 percent of all students would have been eligible for full-price breakfasts, but less than half this amount—17 percent—of the breakfasts served were full price.

DISTRIBUTION OF MEALS—HOUSEHOLD CHARACTERISTICS

This section examines the distribution of meals (by price status) for two household characteristics—family type (e.g., female head, male head, couple) and number of children. Table 9 presents the distribution of participants by meal price status and family type for the NSLP and SBP. Three family types are defined: Single Parent Female Head, Single Parent Male Head, and Couples and Other. ("Other" may include friends, grandparents, or other relatives.)[2]

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2. Within the Couples and Other category, the majority of individuals are couples. "Other" constitutes less than 25 percent of the total.

Table 8

Distribution of USDA Weekly Meals by Meal Price Status and Grade Level

1983-84 School Year

National School Lunch Program

Grade Level	% of Total Meals in Grade			TOTAL NUMBER OF MEALS (thousands)	PERCENT
	FREE	REDUCED	FULL		
1-3	48.2%	4.7%	47.1%	34,579	27.8%
4-6	38.2	9.0	52.8	38,219	29.9
6-9	29.8	7.2	62.9	31,148	24.4
10-12	25.3	4.1	70.6	23,806	18.6
% of Total	36.5%	6.5%	57.0%	127,752	100.0%

School Breakfast Program

Grade Level	% of Total Meals in Grade			TOTAL NUMBER OF MEALS (thousands)	PERCENT
	FREE	REDUCED	FULL		
1-3	81.7%	6.1%	12.2%	5,244	38.4%
4-6	78.0	4.8	17.2	5,135	37.6
6-9	69.4	2.4	28.2	2,127	15.6
10-12	66.7	14.3	18.9	1,158	8.5
% of Total	77.1%	5.8%	17.1%	13,664	100.0%

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

Table 9

Distribution of Meal Participants by Meal Price Status and Family Type

1983-84 School Year

National School Lunch Program

	% BY PRICE STATUS			NUMBER (Thousands) (% of Total)
	FREE	REDUCED	FULL	
Female Head	41.7%	20.3%	10.0%	6,295 (20.9%)
Male Head	1.5*	0.8*	1.4	425 (1.4%)
Couples and Other	56.9	78.9	88.5	23,356 (77.7%)
Total	100.0%	100.0%	100.0%	100.0%
Number (thousands)	9,763	1,816	18,497	30,076
Percent of Total	(32.5%)	(6.0%)	(61.5%)	(100.0%)

School Breakfast Program

	% BY PRICE STATUS			NUMBER (Thousands) (% of Total)
	FREE	REDUCED	FULL	
Female Head	49.8%	31.4%	16.7%	1,483 (41.1%)
Male Head	0.7*	1.9*	0.3*	24 (0.7%)
Couples and Other	49.6	66.7	83.0	2,102 (58.2%)
Total	100.0%	100.0%	100.0%	100.0%
Number (Thousands)	2,564	222	823	3,609
Percent of Total	(71.0%)	(6.2%)	(22.8%)	(100.0%)

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: Columns may not sum to total due to rounding.

*Reported statistics are based on an unweighted sample of less than 30 observations.

Over three-quarters of all meals served to students with the NSLP available were from households headed by two adults. Twenty-one percent were from female-headed households and only 1 percent was from male-headed households. The distribution was considerably different for those households with a student certified as eligible for free meals. Almost 42 percent of students certified as eligible for free meals were from female-headed single-parent households. The higher proportion of free-meal students from female-headed households is consistent with the much higher incidence of poverty among female-headed households than for the general population. In 1983 the poverty rate for female-headed households with children was 47.2 percent, more than double the poverty rate for all families with children (17.8 percent). Reduced-price students were also more likely to come from households with female heads. More than one in five reduced-price students fell into this category.

Female-headed households were frequently located in schools offering the SBP—two out of every five students overall and one out of two students certified for free meals fell into this category. Two factors contribute to the higher rate: a higher incidence of female-headed households among free SBP than free NSLP participants and a much larger proportion of SBP participants (71 vs. 33 percent) in the free category.

NSLP participants in the free and reduced-price categories were more likely to be from larger households than full-price participants. Table 10 shows the distribution of participating students by price status and the number of children in the household. Households with members in the free or reduced-price category had on average about three children, while paid households averaged only 2.3 children. Slightly over 90 percent of all paid students came from households with one to three children; only about 3 percent were from households with five to seven children. In contrast, only two-thirds of all participating free and reduced-price students were from households with one to three children.

The pattern differed for households with a student participating in the SBP. Free students, on average, came from households with more children than paid households, (3.4 vs. 2.5); however, reduced-price students were from households similar in size (2.6 children) to paid households. As noted previously, results for reduced-price breakfast participants should be interpreted with caution because of the small sample size.

Student Race, Sex, and Age: Table 11 provides a breakdown of participants by race and sex. The typical student with the school lunch program available was white, slightly more likely to be male than female, and was on average 11.8 years of age. However, there were significant differences in this profile pattern among meal status categories.

Although 73 percent of all students in schools offering the NSLP were white, the proportion ranged from 84 percent for full-price students to 45 percent for free students. Black and Hispanic students were disproportionately found in the free and reduced-price categories. Overall, 17 percent of students at schools offering the programs were black; among free students the proportion was 38 percent. Hispanic students accounted for 8 percent of all students, but they comprised 13 percent of the free and reduced-price categories.

About 51.5 percent of all students with the program available were male, while 48.5 percent were female.

Table 10

Distribution of Students Participating at Least Once Per Week by Meal Price Status and Number of Children

1983-84 School Year

National School Lunch Program

Number of Children	FREE	REDUCED	FULL	Total Number (thousands) (% of Total)
1	10.2%	10.9%	20.7%	5,028 (16.7)
2	27.8	27.0	44.3	11,394 (37.9)
3	28.9	27.4	25.2	7,974 (26.5)
4+	33.1	34.7	9.9	5,679 (18.9)
Total	100.0%	100.0%	100.0%	
Total Number (thousands)	9,763	1,816	18,497	30,076
Percent of Total	(32.5%)	(6.0%)	(61.5%)	(100.0%)
Average Number of Children	3.2	3.0	2.3	

School Breakfast Program

Number of Children	FREE	REDUCED	FULL	Total Number (thousands) (% of Total)
1	11.3%	26.2%	18.3%	499 (13.8)
2	24.4	33.2	35.3	989 (27.4)
3	27.3	4.0	32.7	979 (27.1)
4+	36.9	36.8	13.7	1,141 (31.7)
Total	100.0%	100.0%	100.0%	
Total Number (thousands)	2,564	222	823	3,609
Percent of Total	(71.0%)	(6.2%)	(22.8%)	(100.0%)
Average Number of Children	3.4	2.6	2.5	

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: Columns may not sum to total due to rounding.

Table 11

Distribution of Students at Schools Offering the NSLP by Race, Sex, and Average Age

	Percent Distribution Within Price Status			
Student Race	Free	Reduced	Full	Total
White	45.2	61.8	84.4	73.0
Black	38.0	20.3	8.1	16.6
Hispanic	13.2	13.3*	6.3	8.4
Asian	2.1*	3.4*	0.9*	1.4
American Indian	1.5	0.6*	0.3*	0.6

Student Sex	Free	Reduced	Full	Total
Female	50.0	49.7	47.8	48.5
Male	50.0	50.3	52.2	51.5

	Free	Reduced	Full	Total
Average Age of Student (Years)	10.9	11.5	12.2	11.8

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: Columns may not sum to total due to rounding.

*Reported figures are based on an unweighted sample of less than 30 observations. Observations with missing information on race (i.e., 15 missing observations) or sex (35 missing observations) were not included in the table.

Free students, on average, were younger than reduced-price and full-price students. The average age among free students was 10.9 years, 11.5 for reduced-price, and 12.2 for full-price. This result is consistent with the higher incidence of free and reduced-price eligible students in elementary schools.

HOUSEHOLD INCOME

Average household income, as would be expected, varied with price status. Households with free NSLP participants had annual average incomes of $11,386. For NSLP students from reduced-price households, average annual income was $17,639; for full-price students it was $32,068. Average household income was approximately one-fifth lower among SBP recipients.

The sources of income and their relative importance was substantially different among price status groups. Tables 12 through 14 present average household income by source for free, reduced-price, and full-price participants.

Earned Income: Approximately two-thirds of all participants receiving free meals were members of a household that reported income from wages, salaries, or self-employment earnings (table 12). Households reporting earned income had total incomes approximately one-third higher ($15,114) than the average for all households ($11,386). For households reporting earned income, it was the major source of income, accounting for 83 percent of the household total. Households with free participants and reporting earned income had an average of slightly more than $12,500 from this source.

Ninety-four percent of reduced-price participants were members of a household that reported earned income (table 13). On average, these households had earned incomes of nearly $16,500. Earned income accounted for approximately 92 percent of total income for these households.

All full-price participants in the sample reported earned income, averaging a little more than $30,000 per household. Earned income was the prime source of income (94 percent of total household income) for these households.

Fewer free SBP participants had earned income (58 vs. 66 percent) and for those SBP households reporting earned income, the amount was less than among the free NSLP households. Although earned income composed approximately 80 percent of total income for those reporting it, the average amount for free SBP households ($9,857) was 21 percent lower than it was for free NSLP households. No comparisons are drawn between NSLP and SBP reduced-price participants due to the small sample size. Among paid participants, slightly fewer households reported earned income (95 percent) and average earned income ($25,416) was 16 percent lower.

Public Assistance: Households reporting receipt of public assistance or welfare were found almost exclusively in the free-price category (table 12). Nearly 36 percent of students receiving free lunches were from a household receiving public assistance. Forty-two percent of free breakfast participants fell into this category. Among NSLP households receiving public assistance, it accounted for three-fourths of total household income. Average total income for public assistance/welfare households was $5,573, less than half the overall average income for households with free participants.

Table 13

Annual Income of Free Participants by Source[1]

1983-84 School Year

Source	All Participants: Average Income by Source ($)	Participants with Income: Percent Reporting Income (%)	Participants with Income: Average Income by Source ($)	Participants with Income: Average Percent of Total Income (%)
National School Lunch Program				
Wages, Salaries, Self-Employed Earnings	$8,334	66.3%	$13,914	83.8%
Public Assistance or Welfare	1,493	10.7	4,180	75.0
Unemployment Compensation	396	9.7	3,647	44.0
Social Security and Pensions	797	14.3	5,097	58.8
Alimony or Child Support	188	6.4	3,220	34.0
Other Income[2]	388	7.6	5,410	21.7
Total Income From All Sources	11,386			
Average Number of Children	3.2			
School Breakfast Program				
Wages, Salaries, Self-Employed Earnings	$5,874	57.7%	$9,857	81.1%
Public Assistance or Welfare	1,708	43.3	3,951	78.6
Unemployment Compensation	331	6.7	4,867	38.6
Social Security and Pensions	798	15.3	5,131	62.4
Alimony or Child Support	154	9.0	1,685	31.7
Other Income[2]	43	3.6	1,617	15.4
Total Income From All Sources	8,907			
Average Number of Children	3.4			

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

[1]Statistics presented for particular income categories may be based on a sample of less than 30 students. Unweighted National School Lunch Program sample: 1,338. Unweighted School Breakfast Program sample: 435.

[2]Other Income includes Dividends, Interest, Rent, Contributions, Estates, Trusts, Royalties, and other cash income.

Table 13

Income of Reduced-Price Participants by Source[1]

1983-84 School Year

National School Lunch Program

Source	All Participants: Average Income by Source ($)	Participants with Income>0: Percent Reporting Income (%)	Participants with Income>0: Average Income by Source ($)	Participants with Income>0: Average Percent of Total Income (%)
Wages, Salaries, Self-Employed Earnings	$15,408	94.4%	$16,470	91.5%
Public Assistance or Welfare	40	3.4	1,179	20.0
Unemployment Compensation	251	16.0	1,580	10.1
Social Security and Pensions	1,666	19.7	8,514	53.7
Alimony or Child Support	140	6.1	2,331	16.4
Other Income[2]	134	13.9	978	4.7
Total Income From All Sources	17,639			
Average Number of Children	3.0			

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

[1]Statistics presented for particular income categories may be based on a sample of less than 30 students. Unweighted National School Lunch Program sample: 199.

[2]Other Income includes Dividends, Interest, Rent, Contributions, Estates, Trusts, Royalties, and other cash income.

Table 14

Income of Full-Price Participants by Source[1]

1983-84 School Year

Source	All Participants: Average Income by Source ($)	Participants with Income>0: Percent Reporting Income (%)	Participants with Income>0: Average Income by Source ($)	Participants with Income>0: Average Percent of Total Income (%)
National School Lunch Program				
Wages, Salaries, Self-Employed Earnings	$29,655	100.0%	$30,331	93.6%
Public Assistance or Welfare	56	1.8	3,135	37.0
Unemployment Compensation	210	6.7	3,131	13.6
Social Security and Pensions	728	10.0	7,479	33.4
Alimony or Child Support	233	7.8	3,127	13.7
Other Income[2]	1,187	25.0	4,927	10.0
Total Income From All Sources	32,068			
Average Number of Children	2.3			
School Breakfast Program				
Wages, Salaries, Self-Employed Earnings	$20,460	94.7%	$25,416	92.0%
Public Assistance or Welfare	198	4.6	4,320	52.6
Unemployment Compensation	432	10.4	4,142	13.8
Social Security and Pensions	1,100	15.7	7,006	31.0
Alimony or Child Support	153	6.9	2,201	16.2
Other Income[2]	572	16.0	3,565	18.8
Total Income From All Sources	26,516			
Average Number of Children	2.5			

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

[1]Statistics presented for particular income categories may be based on a sample of less than 30 students. Unweighted National School Lunch Program Sample: 1,737. Unweighted School Breakfast Program sample: 106.

[2]Other Income includes Dividends, Interest, Rent, Contributions, Estates, Trusts, Royalties, and other cash income.

Only 3 percent of reduced-price students and 2 percent of full-price students were from households reporting receipt of public assistance. However, among full-price participants reporting receipt of public assistance, this source of income accounted for 37 percent of total household income. On average, these households reported public assistance income of about $3,135, which is somewhat lower than the average found among free-price households.

Unemployment Compensation: About 10 percent of NSLP free participants, 16 percent of reduced-price students, and 7 percent of paid students were members of households reporting receipt of unemployment compensation income. While this was a significant source of income for free households reporting at least some income from this source (44 percent of total household income), it was of lesser significance for reduced-price (10 percent) and full-price households (14 percent). Similarly, if households with free SBP participants reported receiving unemployment compensation, it was a significant income source (59 percent of total household income) for these households.

Social Security and Pensions: A significant portion of NSLP recipients were from households that received income from Social Security or another pension program. Fourteen percent of free participants, 20 percent of reduced-price participants, and 10 percent of full-price participants fell into this category. The proportions were slightly higher for SBP participants. Social Security and other pensions were the primary source of income for free (62 percent) and reduced-price households (54 percent) that reported income from that source. Among full-price households it represented about one-third of total household income for households reporting income from that source.

Alimony, Child Support, and Other Income: Six to 8 percent of NSLP participants, depending on their meal price status, were members of a household reporting receipt of alimony or child support payments. For free households reporting income from this source, it comprised about one-third of total income. It was a less significant source of income for reduced-price and paid households. Among SBP households, the percent receiving income from alimony or child support varied between 7 and 9 percent across income price categories. For free SBP households receiving income from alimony or child support, it accounted for about one-third of total household income.

Receipt of other income was most prevalent among full-price households, with one-quarter of all NSLP households reporting income from this source. Other income included dividends, interest, rent, contributions, estates, trusts, royalties, and other cash income. Average total income among full-price NSLP households with other income was nearly $50,000, close to 50 percent higher than the overall average. Free and reduced-price NSLP and SBP households with other income reported total incomes much closer to the overall average income for the category.

TRANSFER INCOME

In addition to inquiring about participation in cash transfer programs, the NESNP-II survey included questions on receipt of noncash benefits from the Food Stamp Program and the Special Nutrition Program for Women, Infants, and Children (WIC). Tables 15 and 16 show the distribution of meal participants receiving transfer income from food stamps and WIC, as well as receipt of Unemployment Insurance, Public Assistance, or Social Security.

Sixteen percent of all meal recipients were members of households receiving food stamps; among participants receiving free meals, the proportion was nearly 50 percent (tables 15 and 16). The proportion receiving food stamps was higher for households with incomes below 50 percent of Federally defined income poverty guidelines—81 percent for free households, and 74 percent for all households. The proportion of households receiving food stamps was much lower for households with incomes from 51 to 130 percent of poverty. These households would be eligible for food stamps based on income, although a household could have assets which make it ineligible for the program. About half of the free participants from households with incomes between 51 and 100 percent of poverty and a quarter from households with incomes from 101 to 130 percent of poverty were members of households that received food stamps.

Almost 43 percent of all SBP participants and 59 percent of all free participants belonged to a household that received food stamps. Participation rates by poverty income status were higher than for the NSLP; however, the overall pattern remained the same—food stamp participation was significantly higher for households below 50 percent of poverty than for households between 51 and 130 percent of poverty.

About 5 percent of all NSLP participants and 10 percent of all SBP participants were members of households which received WIC benefits. Among free lunch and breakfast participants the rates were 12 and 13 percent, respectively.

Table 18

Distribution of Meal Participants by Income as a Percent of Poverty and Types of Transfer Income Received

1983-84 School Year

Income as a Percent of Poverty	% IN POV. CLASS RECEIVING TRANSFER: Food Stamps[1]	WIC[2]	UNEMP	PA[3]	SOC SEC	Number of Partic. in Poverty Class--Thousands (% of Total)
National School Lunch Program[1]						
0-50%	74.1%	17.0%	7.1%	38.6%	10.2%	3,199 (10.6)
51-100%	44.0	10.5	10.6	32.3	17.0	4,647 (15.5)
101-130%	15.1	3.8	12.5	10.4	10.0	2,747 (9.1)
131-185%	2.6	4.3	11.4	3.9	8.0	4,083 (13.6)
186+	0.1	0.3	6.2	0.4	4.3	15,400 (51.2)
Total Number Receiving Transfer (thousands)	4,934	1,357	2,482	3,873	2,385	30,076
(Percent of Total)	(16.4)	(4.5)	(8.3)	(12.9)	(7.9)	
School Breakfast Program						
Income as a Percent of Poverty						
0-50%	82.3%	17.0%	6.1%	67.7%	8.4%	1,073 (29.7)
51-100%	55.7	11.0	6.0	32.7	17.7	1,039 (28.8)
101-130%	15.5	6.9	9.2	16.2	11.9	494 (13.7)
131-185%	0.9	6.0	11.4	2.8	7.4	341 (9.5)
186+	0.6	0.0	11.1	0.0	7.2	662 (18.3)
Total Number Receiving Transfer (thousands)	1,546	351	385	1,135	406	3,609
(Percent of Total)	(42.8)	(9.7)	(7.9)	(32.0)	(11.2)	

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

[1]Approximately 17,000 weighted observations had missing data for food stamp receipt in the NSLP portion of the table.

[2]Special Supplemental Food Program for Women, Infants, and Children (WIC). Approximately 13,000 weighted observations had missing data for WIC receipt in the NSLP portion of the table.

[3]Public Assistance or welfare payments including AFDC and SSI.

Table 16

Distribution of Free Meal Participants by Income as a Percent of Poverty and Types of Transfer Income Received

1983-84 School Year

Income as a Percent of Poverty	% IN POV. CLASS RECEIVING TRANSFER: Food Stamps	WIC[3]	UNEMP	PA[4]	SOC SEC	Number of Partic. in Poverty Class—Thousands (% of Total)
National School Lunch Program[1,2]						
0-50%	81.0%	19.0%	7.0%	65.2%	10.9%	2,760 (28.3)
51-100%	51.4	12.2	10.3	35.8	18.2	3,831 (39.2)
101-130%	26.4	5.6	16.7	17.3	9.0	1,430 (14.6)
131-185%	9.6	10.0	9.6	6.0	6.0	934 (9.6)
186+	0.5	1.1	4.5	1.2	4.8	807 (8.3)
Total Number Receiving Transfer (thousands)	4,664	1,173	952	3,484	1,221	9,763
(Percent of Total)	(47.8)	(12.0)	(9.8)	(35.7)	(12.0)	
School Breakfast Program[2]						
Income as a Percent of Poverty						
0-50%	86.0%	17.8%	4.9%	71.0%	8.8%	1,023 (39.9)
51-100%	50.6	12.4	6.8	32.9	19.8	919 (35.9)
101-130%	21.7	9.6	11.2	22.7	12.0	352 (13.7)
131-185%	1.6	6.3	9.6	0.0[5]	8.3	186 (7.2)
186+	5.0	0.0[5]	5.4	0.0[5]	0.0[5]	84 (3.3)
Total Number Receiving Transfer (thousands)	1,502	342	174	1,108	330	2,564
(Percent of Total)	(58.6)	(13.3)	(6.8)	(43.2)	(12.9)	

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

[1]Approximately 17,000 weighted observations had missing data for food stamp receipt in the NSLP portion of the table.

[2]Statistics may be based on sample sizes of less than 30 students.

[3]Special Supplemental Food Program for Women, Infants and Children (WIC).

[4]Public Assistance or welfare payments including AFDC and SSI.

[5]There were zero sample observations in these cells.

APPENDIX A

SUPPLEMENTARY DATA TABLES

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Appendix Table A

Participation Rates in USDA Meal Programs by Meal Price Status and Grade Level

(Students Participating at Least Once Per Week)

1983-84 School Year

National School Lunch Program

Grade Level	FREE	REDUCED[1]	FULL	Total	Total Number of Students (thousands)
1-3	98.8%	94.6%	80.6%	87.9%	8,327
4-6	97.8%	99.2%	77.0%	85.0%	8,535
7-9	94.1%	85.6%	69.8%	76.0%	7,373
10-12	89.9%	79.3%	54.9%	61.0%	5,841
Total	96.2%	91.4%	69.4%	77.5%	
Total Number (thousands)	9,763	1,816	18,497		30,076

School Breakfast Program

Grade Level	FREE	REDUCED[1]	FULL[1]	Total	Total Number of Students (thousands)
1-3	62.0%	39.7%	9.5%	31.3%	1,316
4-6	61.9%	18.8%	12.5%	31.5%	1,337
7-9	39.7%	5.2%	10.1%	17.4%	614
10-12	34.3%	24.4%	3.8%	11.6%	342
Total	53.9%	20.6%	9.0%	24.2%	
Total Number	2,564	222	823		3,609

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: A student is a participant if he or she selects one or more USDA meals in the specific program during a week. The participation rate is the number of participants in a category divided by the total number of students in that category who have the program available.

[1]Reported statistics may be based on an unweighted sample of less than 30 observations.

Appendix Table B

Distribution of Students by Household Income as a Percentage of Poverty and Grade Level

1983-84 School Year

National School Lunch Program

Grade Level	% of Total Students in Grade					Total Students (thousands)	Percent
	0-50%	51-100%	101-130%	131-185%	186%+		
1-3	12.0%	15.6%	8.5%	13.9%	50.4%	9,477	24.4%
4-6	9.9	14.9	8.5	14.1	52.6	10,044	25.9
7-9	7.7	13.7	7.8	13.6	57.2	9,696	25.0
10-12	6.4	10.1	7.3	12.4	63.7	9,571	24.7
TOTAL STUDENTS (thousands)	3,500	5,262	3,118	5,204	21,704	38,789	100.0%
PERCENT	9.0%	13.6%	8.0%	13.4%	56.0%	100.0%	

School Breakfast Program

Grade Level	% of Total Students in Grade					Total Students (thousands)	Percent
	0-50%	51-100%	101-130%	131-185%	186%+		
1-3	16.8%	16.5%	7.7%	12.9%	46.0%	4,203	28.1%
4-6	13.6	17.3	10.5	15.6	43.0	4,248	28.4
7-9	11.2	14.8	8.8	13.6	52.7	3,532	23.6
10-12	9.2	13.6	8.6	14.6	54.1	2,952	19.8
TOTAL STUDENTS (thousands)	1,955	2,354	1,334	2,077	7,215	14,935	100.0%
PERCENT	13.1%	15.8%	8.9%	13.9%	48.3%	100.0%	

Source: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

NOTE: Columns may not sum due to rounding.

Appendix Table C

UNWEIGHTED AND WEIGHTED SAMPLE SIZES FOR SELECTED SUBGROUPS

SUBGROUP	UNWEIGHTED # STUDENTS	WEIGHTED # STUDENTS (thousands)
Total Sample	4,046	38,789
SBP Available	1,809	14,935
By Participation		
Partic. NSLP	3,274	30,076
Partic. SBP	573	3,609
THE FOLLOWING ARE DEFINED FOR NSLP PARTICIPANTS ONLY		
By Price Status		
Free	1,338	9,763
Reduced	199	1,816
Full	1,737	18,497
By Income as a % of Poverty		
0- 50%	513	3,199
51-100%	601	4,647
101-130%	313	2,747
131-185%	438	4,083
Above 185%	1,409	15,400
By Grade Level		
Grade 1-3	933	8,327
4-6	910	8,535
7-9	780	7,373
10-12	651	5,841
By Number of Children		
1	539	5,028
2	1,179	11,394
3	844	7,974
4 or more	712	5,679
THE FOLLOWING ARE DEFINED FOR SBP PARTICIPANTS ONLY		
By Price Status		
Free	435	2,564
Reduced	32	222
Full	106	823
By Income as a % of Poverty		
0- 50%	196	1,073
51-100%	165	1,039
101-130%	71	494
131-185%	55	341
Above 185%	86	662
By Grade Level		
Grade 1-3	218	1,316
4-6	191	1,337
7-9	98	614
10-12	66	342
By Number of Children		
1	73	449
2	165	989
3	151	979
4 or more	184	1,141

SOURCE: National Evaluation of School Nutrition Programs, Phase II (NESNP-II).

APPENDIX B

SUPPLEMENTARY DATA TABLES

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APPENDIX B

DIFFERENCES IN CHILD NUTRITION PROGRAM DATA AND NESNP-II HOUSEHOLD SURVEY DATA

Introduction

The tables presented in the student characteristics report are based exclusively on data from the 1983-84 surveys conducted as part of the National Evaluation of School Nutrition Programs. Information was obtained from a sample of approximately 4,057 public school students, their parents, and the school food authorities in the school districts where the students attend public school. While school nutrition program operations data are not available describing the majority of student characteristics in the report, certain information, primarily on the number of meals served by price status, is available from these data for comparison. When comparing estimates of the average daily meals served and the percentage distribution of these meals across price status categories, it is clear that there are differences between the NESNP and school program operations (SPO) data bases. This appendix discusses problems and differences in these data bases.

Differences in Program Data and the NESNP-II Data

The observed differences between NESNP-II data and program data for the 1983-84 school year are summarized in table 1. The NESNP data indicate that approximately 38.8 million public school students had the NSLP available to them in the 1983-84 school year; that figure compares relatively closely to the enrollment figure of 40.3 million students reported in the SPO data for fiscal year 1984. According to SPO data, approximately 21.9 million meals were served per day in October 1983.[1] After adjusting average daily meals served for absenteeism, using an average attendance rate of 92.7 percent, that figure rises to 23.7 million meals. The average number of meals served per day from the NESNP data, which is based on a full attendance concept, was 25.6 million meals—8 percent higher than the program data.

In addition, program data report that 43.9 percent of average participation per day was in the free-price category, 6.7 percent in the reduced-price category, and 49.4 percent in the paid category. On the other hand, one infers from NESNP data that 36.5 percent of average daily meal service was in the free category, 6.5 percent was in the reduced-price category, and 57 percent in the paid category. Hence, NESNP student-level data suggest that a much higher proportion of meals was served in the paid category than was reported in SPO statistics.

Potential Sources of Differences Between the Two Data Bases

The first point to emphasize in considering differences between the SPO and NESNP data is that data bases from different sources will always yield

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1. This figure is obtained by dividing the total meals served in the month by the average number of operating days—19.9. Analogous calculations can be made for free, reduced-price, and paid meals served.

Table 1

Comparisons Between Data From NESNP-II and School Program Operations Data for NSLP

	SPO Data[1]	NESNP-II Data
Variable	October 1983	1983-84 School Year
Public School Enrollment (millions)	40.3	38.8
Lunches served per month (millions)		
Total	436.8 (100.0%)	N/A
Free	193.2 (44.2%)	N/A
Reduced-price	29.2 (6.7%)	N/A
Paid	214.5 (49.1%)	N/A
Average Number Operating Days	19.9	N/A
Average Daily Meals Served (millions)		
Total	21.9	N/A
Adjusted Avg. Daily Meals Served[2] (millions)		
Total	23.7 (100.0%)	25.6 (100.0%)
Free	10.4 (43.9%)	9.3 (36.5%)
Reduced-price	1.6 (6.7%)	1.7 (6.5%)
Paid	11.7 (49.4%)	14.6 (57.0%)

[1]School Program Operations Data, Food and Nutrition Service, U.S. Department of Agriculture, fiscal year 1984.

[2]The SPO data were adjusted assuming an average daily attendance rate of 92.7 percent; the NESNP-II data are collected based on full attendance.

different results. For example, the NESNP data were collected from a sample of approximately 4,057 students. This sample was intended to be representative of all public school students in the United States that had the NSLP available. Individual observations were assigned weights such that when sample statistics were calculated, they would yield estimates of population statistics. (There is a separate discussion of the NESNP weighting issues in the following section).

On the other hand, the SPO data were actual population counts. These data were from a census of all public schools offering the program. The important point is that any estimates of population statistics will diverge somewhat from true population statistics because there is some error associated with the estimates. In this case, however, the differences observed between the NESNP data and the SPO data were large enough to be statistically significant.

As stated in the previous section, differences between the NESNP and SPO data were evident in the average daily number of meals served by meal price status category (appendix B, table 1). This also suggests that similar differences exist in the distribution of weekly meals by meal price status and household income/grade level (tables 7 and 8, respectively). Some of these differences should have been reduced by taking absenteeism into account. For example, since SPO data were reported meal counts, the number of meals served was not corrected for absenteeism, while the NESNP data assumed full attendance (i.e., NESNP asked students to fill out diaries over the last 5 consecutive days of attendance). When program data were adjusted for the average attendance rate—92.7 percent—differences between NESNP and SPO data were still not reconciled.

A large part of the reason why this adjustment did not narrow this difference is that the average attendance rate may vary across the price status groups. For example, it is possible that free students have a higher attendance rate than paid students—especially if low-income children are heavily dependent on the NSLP as an important part of their daily diet. Unfortunately, information is not available to measure attendance by income category, which could explain the differences between SPO and NESNP data.

Still other differences concern collection methods, timing, and sources. Participation information in the NESNP data was based on a 5-day diary completed by the student in which he or she indicated whether he or she ate each meal, how much it cost, etc. in the last 5 consecutive days he or she attended school. Program data were actual counts of meals served by price category over the course of a month. Thus, NESNP participation data were based on 1 week's collection effort, while SPO data were based on monthly meal counts. Finally, the NESNP data in this report were based on student response, while SPO data were reported by schools. If school-level data from NESNP on the number of monthly meals served by price status are compared to SPO data, as shown in table 2, the distributions are remarkably similar.[2]

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2. The distributions reported for the NESNP-II school-level data are based on unweighted sample observations. Analysis of the school observations was not conducted using the sample weights because the initial weighting scheme was judged to be insufficient for general analysis.

Table 2

Percentage Distribution of NSLP Meals

Meal Price Status	SPO Data[1]	NESNP-II Data School-Level
Free	44.2%	44.8%
Reduced-Price	6.7%	6.7%
Full-Price	49.1%	48.5%
Total	100.0%	100.0%

[1]School Program Operations Data, Food and Nutrition Service, U.S. Department of Agriculture, fiscal year 1984.

Weighting of NESNP-II Data

Another potential source of the differences between the two data sets is the weighting scheme developed for the NESNP data. Students were drawn at random for inclusion in the NESNP-II survey, but oversampling occurred in schools with higher than average poverty rates. As a result, weights were assigned to each observation to ensure that the sample was representative of the population of students in public schools offering the NSLP.

The unweighted NESNP data were also analyzed to determine whether they yielded substantially different results. Overall, the percentage distribution of meals served in the free, reduced-price, and paid categories agreed much more closely with the distribution in the SPO data. This is shown in table 3. This result is puzzling, since lower income schools were oversampled; we would have expected to see a higher proportion of free meals. However, despite these differences in the meal distribution by price status, the unweighted data yielded similar results as the weighted data for most of the tables in this report.

Table 3

Percentage Distribution of NSLP Meals

Meal Price Status	SPO Data[1]	NESNP-II Data Unweighted Student File
Free	44.2%	44.6%
Reduced-Price	6.7%	6.4%
Full-Price	49.1%	49.0%
Total	100.0%	100.0%

[1]School Program Operations Data, Food and Nutrition Service, U.S. Department of Agriculture, fiscal year 1984.

For example, table 4 compares weighted and unweighted data on weekly meals by grade level. Although there is some price status variation within grade, the overall distribution of meals by grade is very similar. In general, most of the conclusions drawn from the weighted data would also be drawn from the unweighted tables.

Table 4

Distribution of USDA Weekly Meals by Grade Level—NSLP

	Percent of Meals	
Grade Level	Weighted Data[1]	Unweighted Data[1]
1-3	27.8%	28.5%
4-6	29.9%	29.1%
7-9	24.4%	23.6%
10-12	18.6%	18.8%

[1]National Evaluation of School Nutrition Programs, Phase II (NESNP-II). See report table 8 for further detail.

Thus, a comparative analysis of the weighted and unweighted data sets yielded two outcomes that remain a puzzle. First, it is surprising that we obtain similar results for many of the tables in the report given that oversampling of low-income schools occurred and that the initial weighting scheme for the school-level data base is insufficient. Second, it is puzzling that—since we do not observe tremendous variations in the data on a table-by-table basis—differences persist between NESNP and SPO data on the total number of meals served by price status.